

FRET PROTEASE ASSAYS FOR CLOSTRIDIAL TOXINS

ABSTRACT OF THE INVENTION

The present invention provides clostridial
5 toxin substrates useful in assaying for the protease
activity of any clostridial toxin, including botulinum
toxins of all serotypes as well as tetanus toxins. A
clostridial toxin substrate of the invention contains a
donor fluorophore; an acceptor having an absorbance
10 spectrum overlapping the emission spectrum of the donor
fluorophore; and a clostridial toxin recognition sequence
that includes a cleavage site, where the cleavage site
intervenes between the donor fluorophore and the acceptor
and where, under the appropriate conditions, resonance
15 energy transfer is exhibited between the donor
fluorophore and the acceptor.